

## Programming Assignment 3

(100 points)

**Due Date: 6:59 PM Wednesday, February 22, 2012**

### Educational Goal

Become familiar with built-in types of data.

### Requirements

- Create folder *hw3* under your *it114* folder.
- Helping examples for this assignment: Built-in Types of Data textbook webpage <http://introcs.cs.princeton.edu/java/12types/>.
- Body mass index (BMI) is a measure of body fat based on height and weight. The BMI formula is  $BMI = (\text{Weight in Pounds} / (\text{Height in inches} * \text{Height in inches})) * 703$
- Design and implement a program **CalculateBMI.java** that takes Weight (in pounds) and Height (in inches) and prints out *true* if the calculated BMI is in normal weight between 18.5 and 24.9 (including 18.5 and 24.9) and *false* if the calculated BMI is less than 18.5 or greater than 24.9.
- Comments for CalculateBMI.java, follow the same style used by the example, <http://introcs.cs.princeton.edu/java/12types/LeapYear.java.html>. That is, explain how to compile and run the program and what the results are.
- Compile CalculateBMI.java and generate CalculateBMI.class under the same folder (/it114/hw3).
- Run CalculateBMI.class and produce results under your UNIX account.

### Submission Requirements

1. The homework folder and homework files must be created under your Unix account **before** the submission deadline. **Zero points for late submission.**
2. Turn in the paper copy of **the source code (.java file), outputs of the program, and the completed cover page (provide your name and UNIX ID in the cover page)** in class. **Paper copy should be bound firmly together as one pack (for example, staple, but not limited to, at the left corner). 5 points will be deducted for unbounded homework.**
3. No hard copies or soft copies results in 0 points.